



CONSERVATION OF COASTAL FOREST AND PEATLANDS IN GUNUNG ARONG FOREST RESERVE, JOHOR

Summary Annual Progress Update from January to December 2023

1. Introduction

The project for the Conservation of Coastal Forest and Peatlands in Gunung Arong Forest Reserve (GAFR), Johor is being implemented by the Global Environment Centre (GEC) in partnership with the Johor State Forestry Department (JSFD) together with local stakeholders and financed by TH Plantations Berhad. Its objective is to protect and rehabilitate forests and peatlands in the north-eastern portion of Gunung Arong Forest Reserve, Johor. It was initiated in July 2022 and is planned to be completed in June 2029.

This report describes the progress made in 2023. During the year, several crucial activities were completed to strengthen the collaboration between the stakeholder, community and the relevant agencies. GEC, worked closely with the JSFD to develop a detailed plan for the year which was implemented with the local community, local government agencies and the support from TH Plantations Berhad.

The project focuses on the protection and rehabilitation of the northeast portion of GAFR consisting of the lowland forest with approximately 1,500 ha of peat swamp forest/peatland. The project has [progressed well in 2023 with assessments completed, partnerships with community established, fire prevention teams patrolling the area and restoration activities initiated. An official project launching event was undertaken in October 2023.

2. Progress of the activities according to the project implementation plan from January to December 2023

The following table below is the outlines key progress of the activities from January to December 2023 according to the project implementation plan which will contribute towards the achievement of the immediate objectives.

No.	Activity	Progress and accomplishment of the activities
1.	Field assessment and mapping	As per the project scheduled activities and workplan, these are the various assessments and field activities were executed: <ul style="list-style-type: none"> i. A comprehensive field assessment was conducted including the analysing of baseline data on peatland, drainage, fish, wildlife, and flora surveys and local community questionnaires survey, as well as utilizing data from local and state plans and secondary references. ii. Continued the long-term wildlife monitoring using camera traps at FC 86, FC 83, and FC 103 to document wildlife inhabiting the GAFR area and crossing the rehabilitation site. iii. Implemented regular patrolling, documenting wildlife roadkill incidents in GAFR and surrounding areas such as Jalan



No.	Activity	Progress and accomplishment of the activities
		<p>Teluk Arong, Jalan Tanjung Resang and Jalan Endau main road.</p> <p>iv. Conducted assessments to identify degraded areas for tree planting in FC 83, FC 84, FC 86, and FC 103.</p> <p>v. Evaluated FC 92's area for suitable locations for canal block construction to monitor natural regeneration, included in the proposal for 11 canal block construction sites.</p>
2.	Engaging the local community for setting up the Community Based Organisation (CBO)	<p>Following the initial baseline community assessment's result, several meetings and follow-ups were conducted to secure the cooperation of local communities in implementing the GAFR conservation project. The project concept and objectives were presented to ensure community understanding. A positive response from Kampung Tenglu Batu 6, expressing interest in future activities. Similarly, communities in Kampung Penyabong and Air Papan showed interest to be part of the Community-based Organisation (CBO) for the project. The GEC team maintained consistent engagement with village heads, including En. Mohamad Norsyafuan bin Rosli (Head of Kg. Air Papan), Hj. Wan Azman bin Wan Jusoh (Head of Kg. Penyabong), and En. Zakaria bin Hj. Awang (Head of Kg. Tenglu Batu 6). A meeting with the Head of Mukim Penyabong was held to discuss on the project implementation and commitment to establish the CBO. In addition, a training session on the Fire Danger Rating System (FDRS) update and canal block construction were conducted to enhance community participation and reduce fire risks in the GAFR.</p>
3.	Meetings and site visit for the proposed project implementation with Johor State Forestry Department (JSFD), District Forestry Office (DFO) and TH Plantations Berhad.	<p>Numerous meetings were held with the Johor State Forestry Department (JSFD) and the District Forestry Office of East Johor to discuss and coordinate field activities for the Gunung Arong Conservation Project, including canal block construction and signage installation. A site visit was made in May to GAFR involving the CEO of TH Plantations, GEC, and JSFD to enhance to review the project site. Another meeting with TH Plantations was done focused on updating the project progress and coordinating the project launching ceremony during the Arong Man Challenge V2 2023. A series of separate meeting with the District Forestry Office of East Johor were done to provide updates on GAFR progress, canal block construction, signages installations, and discussions about the 2023 and 2024 work plans and progress made.</p>
4.	Project launching ceremony	<p>An official project launching event was successfully held at Taman Eko-Rimba Teluk Arong on 28th October 2023, in conjunction with the Arong Man Challenge V2 2023. The event was attended by the Chief Executive of TH Plantations, YBr. Tuan Mohamed Zainurin Bin Mohamed Zain and TH Plantations officials. The launching ceremony was officiated by YBr. Dato' Haji Salim bin Aman, the Director of Johor Forestry (JFSD) on</p>



No.	Activity	Progress and accomplishment of the activities
		behalf of the Johor State Executive Councillor (EXCO) for Tourism, Environment, Heritage and Culture.
5.	Communication, Educational and Public Awareness (CEPA)	In conjunction of the Arong Man Challenge, GEC had taken part in the exhibition organised by JSFD themed “Sustainable Tourism, Biodiversity and Conservation”. The main focus of GEC’s exhibition was to promote the GAFR protection, emphasizing the importance of safeguarding and rehabilitating the area. During exhibition, visitors came from various background consists of students, community members, corporate representatives and the government agencies were engaged in discussions highlighting the importance of GAFR protection.
6.	Water table monitoring (piezometer)	10 Piezometers were installed in strategic locations in peatlands within and at the border of the Forest Reserve. The piezometer data collected from 10 units of piezometer from March 2023 to December 2023 includes readings from FC 103 and adjacent areas of FC 83, FC 84 as well as within the oil palm plantation. To facilitate effective communication and information sharing, the collected data was disseminated through project-related WhatsApp groups on a weekly basis.
7.	Canal blocks construction	A total of 8 canal blocks were constructed in the adjacent areas to FC 83, FC 84 and within FC 94 of GAFR. The canal block construction aimed to increase the water level in peatlands inside the forest compartment and limit the water outflow. This proactive measure contributes to effective ecosystem management and supports the goals of the restoration and fire prevention initiatives.
8.	Signboard installation	Four Fire Danger Rating System (FDRS) signboards were installed at strategic locations with high fire risk. Six signboards displaying the Johor forest enactment were installed around GAFR borders. The balance of the signboards and the no trespassing signboards are planned to be installed in quarter one of 2024.
9.	Forest fire patrolling and monitoring	Forest fire prevention patrols were undertaken on four days per week between March till December by local community patrollers. A significant contribution by the patrollers occurred on 24 th October 2023, when they detected a fire in the FC 86, GAFR and immediately informed the authorities. In result of their prompt response, the fire was rapidly controlled and stopped. In addition to their fire detection efforts, the community patrollers provided regular updates on the status of the FDRS signboards installed around the GAFR zone. Assisted by the patrollers only 1.5ha was affected by fire in the whole of 2023.







3. Pictorial report of the activities implemented from January - December 2023

Table 2: The following pictorial updates of the progress of the activities from January to December 2023 according to the project implementation plan:

No.	Activities	Picture
1.	The team performed ground truthing and site recce in all proposed locations for the canal blocks construction in Gunung Arong Forest Reserve.	
2.	The continuation of wildlife monitoring and assessments through the installation of camera traps, and collection of wildlife footages.	







<p>3.</p>	<p>The discussion with locals of Kg. Tenglu and community patrollers. Meeting with head of Mukim Penyabong, Mr. Ahmad Haziq</p>		
<p>4.</p>	<p>The coordination meeting with JSFD in JSFD Headquarters and district forestry office in Mersing.</p>		



<p>5.</p>	<p>The installation work of FDRS and Enactment signages with involvement of local community members in GAFR.</p>		
<p>6.</p>	<p>The construction of canal block with local community from Kg. Tenglu Batu 6.</p>		



<p>7.</p>	<p>The briefing session was conducted for the patrollers to demonstrate how to utilize the FDRS indicator based on the regular FDRS update shared by GEC team.</p>		
<p>8.</p>	<p>The project launching ceremony was held in Taman Eko Rimba Telok Arong, GAFR</p>		



9. The exhibition showcases GEC's project initiatives and progress during the Arong Man Challenge V2 2023 at Taman Eko Rimba Teluk Arong, GAFR



10. The GAFR-Conservation Field Office officiated by Director of JSFD, CEO of TH Plantations Berhad and Director of GEC.





<p>11. The meeting with representatives from the community of Kg. Air Papan, Kg. Penyabong and Kg. Tenglu Batu 6</p>		
<p>12. The third coordination meeting of TH Plantations, - GEC-JPNJ Project was held at Johor on 27th December 2023</p>		

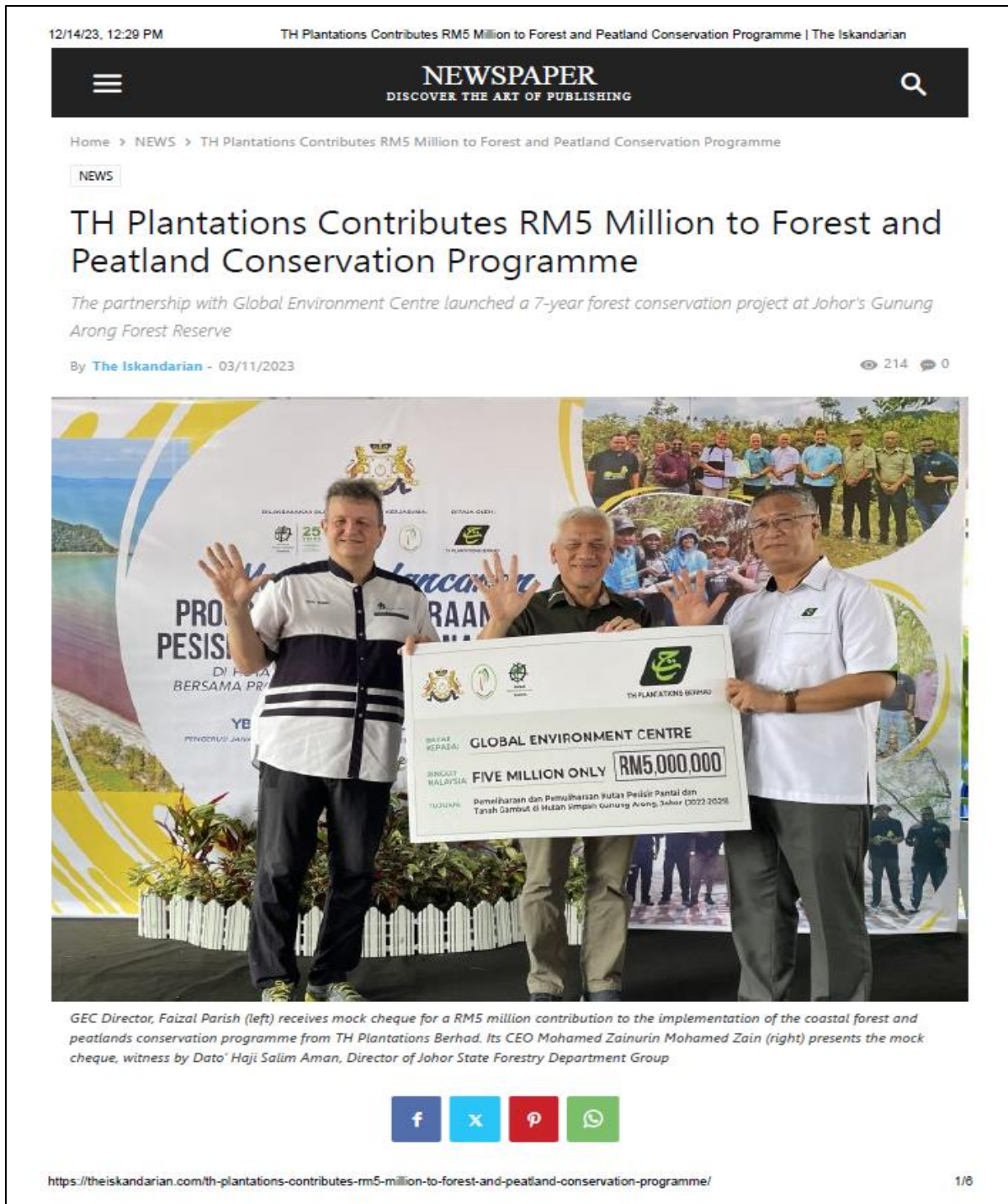


Figure 2. Media coverage on the launching event of The Conservation of Coastal Forest and Peatlands in Gunung Arong Forest Reserve, Johor by The Iskandarian.

3單位聯手 保護豐盛港阿榮山

(丰盛港9日讯) 柔佛州森林局、全球环境中心(GEC)及TH种植(TH Plantations Bhd)联手合作,保护丰盛港阿荣山(Gunung Arong)森林保护区达4300公顷的沿海森林及泥炭地。

通过这项合作计划,TH种植拨款500万令吉,自今年开始至2029年,在森林区推行7个保护计划,包括进行资料收集与研究及推行“社区基线评估”研究。

除此之外,相关单位通过泥炭地水资

源管理和森林恢复工作,在受保护地区重新种植7000棵树苗。

此计划涉及居住邻近的社区居民,

以共同参与监督工作,尤其预防泥炭土火患。

这项计划也通过森林恢复、休闲与旅游活动,提升该区居民的生活,同时协助农民及社区,有效管理由3个单位为维护森林而开发的种植区。

此项计划是依据可持续发展目标(SDG),支持柔佛州沿海沼泽和泥炭土森林地区的保护工作。



的沿海森林及泥炭地。
保护丰盛港阿荣山森林保护区计划,涉及4300公顷

Figure 3. Media coverage on the launching event of The Conservation of Coastal Forest and Peatlands in Gunung Arong Forest Reserve, Johor by The Iskandarian.



5. Challenges and problems encountered during the implementation period (January - December 2023)

i. Irregular weather patterns, monsoon changes and El-Niño

In 2023, the conservation project in Gunung Arong Forest Reserve (GAFR) faced challenges due to irregular weather patterns. Despite this, the survey team completed field assessments from April to September, with hot weather posing fire risks. Precautions included deploying patrollers and constructing temporary canal blocks to maintain water levels and prevent fires. Patrollers played a vital role in raising awareness and disseminating information about hydrological management and fire prevention. One reported fire incident prompted the construction of canal blocks to address lack of water for firefighting. The project's success also involved stakeholder meetings, community engagement, wildlife monitoring, and the installation of signboards for fire danger and forest regulations.

ii. Establishment of field office/accomodation for GEC staff

In order to provide accommodation for the GEC team, GEC initially rented a homestay. However later JSFD provided a building for the period 2023 to 2030 for combined use as office and accomodation. The project has taken responsibility for internal repairs, maintenance, and external area cleaning. The office, named GAFR Conservation Field Office (Pejabat Lapangan Konservasi Hutan Simpan Gunung Arong), became fully operational in August 2023 and was officiated in October 2023.